Ambush! The Road War in Afghanistan

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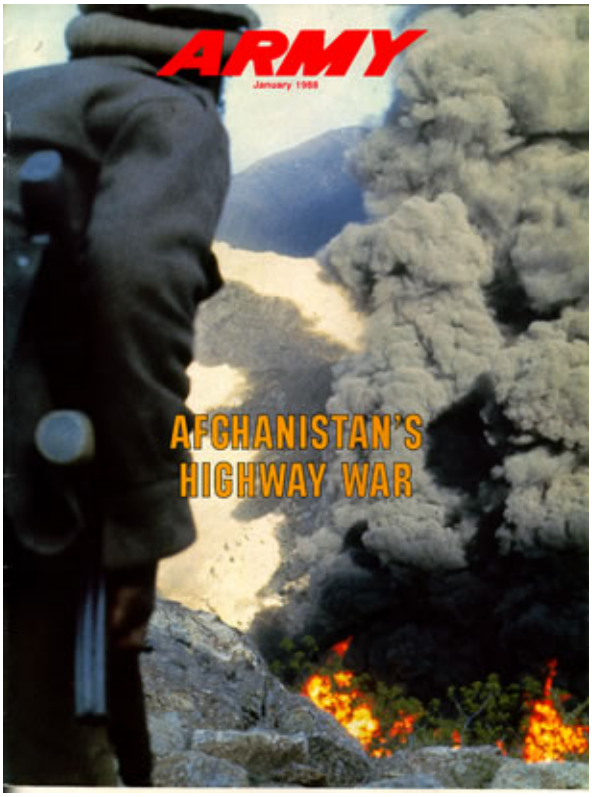

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Afghanistan's highways ... carved out of rocks, running between the yellow dunes of the deserts, or through lush subtropical greenery ... Often they are pitted with craters from mortar shells or landmine explosions, and on the roadside one can see the hulks of burned vehicles - silent witnesses to the cruel 'highway war.'

"Fiery Kilometers"
Red Star
26 May, 1985

A familiar scene continues to be played out on Afghanistan's roads with very real consequences for the Soviet prosecution of the war against the Afghan resistance. One Soviet military author described this typical prologue to what has on numerous occasions become a military disaster:

> The head of the column was winding its way up the mountain with effort. It then made a tight turn behind the cliff and proceeded downward beyond the turn. At any minute, mines might begin exploding or mortars may begin firing upon us from the cliffs. The leader again waved his hand - watch and keep watching!
>
> Matviichuk's vehicle was almost at the turn when the first explosion took place. This was followed by a second and a third. The last one blew up the lead truck. This happened so unexpectedly that all those sitting in the combat vehicle were momentarily petrified despite their state of readiness.

A *Mujahedeen* fighter crouches as a vehicle burns in the background following a surprise rebel attack on a Soviet military convoy along a main road artery to Kabul.

This particular action reportedly ended well for the Soviet participants who quickly organized a defense and beat off the insurgent attack. Numerous other reports indicate, however, that what often follows is the loss of a substantial portion?and sometimes all?of a military convoy, the seizure of high quality weapons and supplies by the Mujahedeen guerrillas, a road closure lasting hours or days and a disruption of materiel support to deployed Soviet or Afghan forces that must be compensated for in some way. This kind of action remains a central feature of Soviet military operations in Afghanistan and a factor that preoccupies Soviet commanders and planning staffs.

Well-established, long-standing Soviet approaches for identifying, studying and applying military lessons learned have been operating in Afghanistan since the Soviet invasion of that nation in the closing days of 1979. War experiences are being studied in Soviet military schools and academies, incorporated in training programs and discussed in an increasingly candid way in the military press.

The performance of the combat arms exemplified most prominently in Afghanistan by airborne, air assault, special operations and aviation units-clearly is receiving close attention from Soviet planners. One of the most important aspects of the Soviet military experience in Afghanistan, however-as illustrated by the kind of transportation vulnerability noted above-is the performance of the Soviet logistic system and Soviet efforts to set up the rear service infrastructure to sustain military forces and the Afghan civilian economy.

A growing body of evidence suggests that Soviet rear service problems in Afghanistan are having a major impact on logistic and movement support concepts force wide - concepts that would be critical for the successful conduct of combat operations in European or other theaters far removed from Afghanistan. Evolving Soviet perceptions are based in large measure on the prosecution of what they call the "highway war" - *dorozhnaia voina* - the movement of troops and supplies of all types over the limited and frequently interdicted roads throughout Afghanistan.

The initial movement of major Soviet invasion forces into Afghanistan was conducted with a speed and effectiveness that seemed the essence of Soviet military theory and practice. In late December 1979, Soviet airborne troops began landing at Kabul International Airport, the military air base at Bagram some 65 kilometers north of the Afghan capital and at other points around the country. These light armored units moved quickly to seize control of the Afghan governmental infrastructure, communications facilities, airfields and population centers.

Following the introduction of this airborne vanguard, three or four Soviet motorized rifle divisions moved into the country concentrated principally on two major axes leading from Termez and Kushka in the USSR. Motorized rifle units, moving along the limited road network of the country, established garrisons at the larger population centers, reinforcing or replacing the airborne forces landed earlier.

Soviet troopers scramble out of their BTR-70 armored personnel carrier as their convoy is attacked by rebels out of the Panjshir Valley, on the main road between Salang Pass and Kabul, near Charikar; petroleum products pipelines run at and below the shoulder of the highway.

An initial Soviet concern in supporting the movement of this ground invasion force was to secure the 2,700 meter-long Salang Pass tunnel and its approaches. Constructed by the Soviet Union some 15 years before the invasion, the Salang Pass tunnel is the key choke point along the 450-kilometer route linking Termez: and Kabul. Covered corridors with a combined length of 2,000 meters provide environmental protection for the tunnel approaches, which, leading as they do to the world's highest tunnel, are particularly vulnerable to the effects of a mountain winter environment.

Even before the large-scale introduction of the airborne invasion force, special Soviet units-airborne, air assault or special operations forces-were deployed to secure the Salang Pass area and provided for the safe passage of the motorized rifle columns.

Within weeks of the invasion, the Soviets had established a force of at least 75,000 men in Afghanistan. The difficulties of supplying this relatively modest, slowly growing force became apparent to the Soviets almost immediately. Despite their obvious, intimate familiarity with the region-its geography, climate and roads which the Soviets in a number of cases constructed earlier under economic aid programs-the magnitude of the movement problems engendered by these factors combined with hostile action clearly was unanticipated.

Since Afghanistan has no railroads, all troop movement and resupply had to be conducted initially by motor transport or air. Hundreds of sorties were flown by An-12, I1-76 and An-22 Military Transport Aviation (VTA) aircraft to introduce the initial assault force in the first days of the invasion. After this surge effort, however, sustained VTA flights continued at periodically high rates.

While a number of these sorties brought in reinforcing and support elements together with their supplies, it soon became clear that the Soviets were continuing to rely heavily on VTA for the routine introduction of military materiel ordinarily transported by road. In addition, helicopters were being used extensively to move supplies within the country, an undertaking that in many

cases seemed a wasteful employment of helicopter resources that, as the Soviets themselves note, have their useful loads decreased by 25 percent in a mountainous environment.

Soviet motor transport columns were having severe problems. As noted, Afghanistan's roads are quite limited and run through some of the roughest mountain-desert terrain in the world. Consequently, alternate routes in most cases are simply not available. This problem in itself prevented the establishment of dedicated supply routes. Military troop movements, supply columns and the civilian motor transport so essential for sustaining the Afghan economy all used the same limited routes.

In addition to the major roads and bridges built by the USSR (and largely of a north-south orientation), a number of the principal east-west roads and bridges were constructed in the 1960s under U.S. economic assistance programs. Basic Soviet management of the flow of transportation over these routes initially was quite poor and was further complicated by the weather.

Particularly acute were problems associated with moving cargoes from railheads near Termez on the Soviet border, through the Salang Pass and on to Kabul-the most important single transportation route in the country.

As one Soviet commentary on the Salang described it, "The road winds there in steep and narrow hairpin turns, with a perpendicular cliff on one side and an abyss on the other. The ice-covered route is terrible, and the thousands of trucks which cross the pass every day polish it to a mirror-like shine ... you crawl along at a snail's pace all the time."

The heat and dust of summer, periodic freezing and thawing, flash floods and other climatic factors also create maintenance, visibility and trafficability problems that in many areas constrain road movement. In addition, fuel requirements for both combat and support forces operating in mountainous regions similar to those of Afghanistan are far greater than those in areas like central Europe-70 to 90 percent greater for gasoline and 30 to 40 percent greater for diesel fuel, according to Soviet data from the Transcaucasus Military District.

(Left) The first stage of an attack on a Soviet road convoy on the Salang Pass-Kabul road, as seen from *Mujahedeen* ambush positions. (Right) A column of *Mujahedeen* fighters on the move from a sanctuary Pakistani village near the Afghan border.

Most Soviet motor transport drivers in the early period of the invasion were mobilized reservists, who later were replaced largely by conscripts. Both categories of drivers were unprepared for the difficult supply missions assigned to them and performed badly. In at least some cases, drivers had trained with vehicles other than the large, hard to handle KamAZ trucks that came to dominate long-haul military transport in Afghanistan. Many accidents and frequent confusion were among the consequences of this inexperience, and the lack of institutionalized unit experience added further to early problems.

In fact, the Soviet materiel support system-which handles the storage, transport and delivery of ammunition, fuel, repair parts, food, water, clothing and the like- was just beginning a sweeping reorganization as the invasion took place. Multifunctional materiel support battalions combining a number of supply and transport functions were replacing the motor transport battalions and disparate supply elements organic to every Soviet line division.

New, analogous materiel support brigades were being formed at the same time for the support of armies and fronts in place of the earlier planned, less mobile logistic bases. When fully implemented, these changes would substantially improve a major component of the Soviet logistic system.

Since the Soviet military press was still commenting on the performance of some materiel support unit commanders, their failure to understand the changed nature of their responsibilities and inadequacies in training for the new units years after the invasion, the performance of those recently formed or still forming materiel support units in the 1979-1980 period probably contributed to Soviet supply difficulties.

While geographic and climatic factors together with limited lines of communication (LOCs) combined with early inexperience to produce less than satisfactory logistic performance, it was the frequent, widespread and successful interdiction of supply convoys that most severely constrained logistic support. Effective Mujahedeen use of mines, ambushes, rock slides, fires, bridge demolition and other often innovative interdiction techniques damaged or destroyed convoys and closed roads time after time, including the Salang Pass itself.

As one Soviet source put it, "What surprises the enemy has sprung upon us on these roads." A successful trip from the Soviet border to Kabul became an event to be commemorated and remains so. One 1985 Soviet article described a young soldier's experience this way:

> Igor Chernega, still a private at the time, painted the first small star on the cab of his KamAZ truck a year and a half ago. On that December evening, he was a soldier full of pride. He had withstood the Salang's baptism with dignity, although that two-week trip demanded fortitude, perseverance, stoic patience and human courage such as he had not even suspected he had within him.

While this kind of prose may seem a bit overdrawn, every indication is that Soviet motor transport drivers perform one of the most dangerous and harrowing duties in Afghanistan. Official recognition of this is reflected in the Soviet practice of awarding pennants inscribed "For Courage and Valor" after every 20, 40, 60 or 80 trips. As noted, the drivers themselves paint a star on the side of their truck cabs for each successful trip. As of September 1985, 80 trips was the maximum that could be completed in a twoyear term of service, a Soviet-cited limit that is apparently a consequence of the time required to make the hazardous journey.

Two weeks were required to travel the 450-kilometer route a few years after the invasion, and a period of just several days has been claimed-too optimistically perhaps-as the time required for the round trip as recently as 1985. In the early period of the Soviet occupation, however, several weeks on the roads were commonplace, and many columns did not reach their destinations. Similar problems were encountered throughout Afghanistan, with small convoys and columns being the most frequently and successfully attacked targets.

Overall, Soviet planners were faced with initial and long-term transportation and logistic problems that had the potential of reducing the scope of Soviet-Afghan combat operations, severely hindering the functioning of the Afghan economy and perhaps even limiting the size of forces that could be maintained without an extraordinary level of effort. Soviet responses to these serious difficulties have been instructive and point to the more general application of at least some lessons learned in Afghanistan to transportation and logistic problems in other theaters.

In the eight years since the invasion, the Soviets have made a major effort to establish the fixed facilities and infrastructure necessary to support the storage and movement of supplies of all types. They expanded and modernized the railheads and transloading facilities at Kushka and especially those near Termez to receive the large military and civilian cargoes that arrive principally by rail and then proceed throughout Afghanistan by motor transport.

The entry port of Khairaton on the Afghan side of the Amu Darya River across from Termez became the major starting point for the largest and most important convoys. This essential and heavily used facility, as the Soviets say, "doesn't become silent, even for an hour."

In other areas of Afghanistan, temporary storage areas were replaced or supplemented by more substantial depots and complexes, including the logistic facility at Pol-e Khomri between Khairaton and the Salang Pass.

To reduce the enormous reliance on motor transport, special Soviet engineer units called Pipeline Troops have constructed fuel pipelines from the Soviet border south into Afghanistan. This fuel plays a major role in the support of ground and air operations. At least two such pipelines parallel the Termez-Salang-Kabul road. Like the Afghan roads themselves, they are also the target of frequent, successful *Mujahedeen* interdiction.

Pipeline Troops-referred to familiarly in the Soviet military as *trubachi*-have frequently combated insurgent attacks while constructing or repairing the lines. Pipeline defense is an important mission assigned to the *trubachi*, who in turn are recognized frequently for the performance of their dangerous duties. According to the Soviet press, in 1986 alone, nearly a third of the members of one pipeline battalion received orders and medals for their Afghanistan service.

The protection of road LOCs and associated facilities, as well as the supply convoys themselves, consume the attention of a large part of the Soviet force structure in Afghanistan. In establishing an elaborate system of LOC protection, defense and security there, Soviet planners have clearly looked to their World War II experience and applied appropriate lessons learned. For example, an article in the September 1983 issue of *Military Historical Journal* discussed approaches to land LOC security in World War II that "envisioned a combination of the direct security of installations with an active battle against enemy diversionary and reconnaissance troops."

This involved the establishment of fixed, fortified security posts with small garrisons to protect important bridges, tunnels and other facilities; roving patrols composed of special security troops, traffic control elements and assigned line units that were reinforced by elements from the fixed security posts when necessary; and convoy escort forces of various composition. In short, the LOC security approaches said to be employed in behalf of large field formations like the 1st Ukrainian or 3rd Belorussian *fronts* in 1945 closely resemble the LOC security system employed today in Afghanistan.

(Left) These burned-out trucks and escorting armored vehicles of an ambushed Soviet convoy are mute testimony to the effectiveness of the rebel road interdiction campaign. (Right) These Soviet troops taking a break near their BMP-1 mechanized infantry fighting vehicle were in the vanguard forces moving into Afghanistan, January 1980.

More specifically, the Soviets have set up fortified security posts guarding important LOC points and facilities throughout Afghanistan. These posts, protected by engineer fortifications, mines and obstacles, in some cases constitute or include artillery fire bases covering designated road sections or facilities. Soviet or Afghan garrison troops not only guard a given point or area but also may serve as a quick reaction force tasked to respond to *Mujahedeen* activity within its zone of responsibility. In at least some cases, and apparently quite often, Soviet airborne troops and special operations forces serve in this role.

Security posts are also manned by traffic control troops of the Highway Commandant's Service, motorized rifle or tank units, artillery units, sappers (combat engineers) and other branches. These units periodically patrol stretches of road and respond to convoy attacks or other reported insurgent activity.

The system of fixed facilities also includes smaller traffic control and servicing posts which monitor the progress of convoys along the route, carry out more limited route reconnaissance and security functions, and serve as secure rest stops for the columns. The security posts, traffic control posts and military escorts of the columns themselves are linked by radio, though reaction forces sometimes simply rush "to the sound of the guns." Supporting helicopter or fixed-wing aviation elements are included also in the communications net.

The Salang Pass Tunnel is among the most heavily protected LOC targets in Afghanistan. The tunnel and its immediate approaches are controlled by troops of the Soviet Highway Commandant's Service, who with Afghan support operate traffic control posts at the north and south ends of the tunnel. Linked by landline communications, these posts coordinate the movement of troop supply columns through the tunnel.

While truck convoys are apparently limited to daytime use, combat units, at least, use the tunnel at night. The Highway Commandant's Service units, together with sappers and other assigned troops, protect the tunnel against sabotage, clear the approaches of snow, spread sand for ice and remove any obstacles that interfere with the tunnel's functioning.

In addition to units associated with the tunnel itself, security posts with strong Soviet and Afghan maneuver contingents and artillery provide security and reaction forces for the road and surrounding area. In one area near the Salang Pass, a Soviet airborne unit of probable battalion size, an Afghan battalion and Afghan self-defense forces were included in the security contingent.

Patrols are sent out periodically to check for *Mujahedeen* activity, particularly mines and obstacles that not only pose a danger in themselves but frequently point to a planned ambush. The Soviet press reported an action by security forces near the Salang Pass that illustrates the kind of situation security force elements have been responding to for some years now.

Mujahedeen forces attacked a truck convoy carrying fuel while it was passing through one of the stretches of road covered by reinforced concrete. This attack was reportedly intended to explode the fuel trucks and collapse the covered passageway, thereby closing the road for an extended period. Soviet combat units responded to the firing but were themselves ambushed on the way to the attack site. Responding Soviet forces were further blocked by burning tanker trucks. Nevertheless, as the Soviet press reported it, the attackers were beaten off, fires extinguished and the convoy sent on its way after a four-hour delay, leaving behind a "passageway, blackened by soot, the hulls of burned vehicles lying below, bullet holes in the asphalt and concrete." As noted earlier, Soviet and Afghan efforts are not always this successful, and entire columns have been lost near the Salang.

Convoys in Afghanistan are now constituted to provide for their own defense and security before outside assistance arrives. This is accomplished through the combat action of rear service personnel themselves alongside task-organized convoy escort groups and detachments assigned to the columns. The Soviets have explicitly noted that smaller convoys are the most frequently hit targets. In addition, the security arrangements associated with any kind of road movement are extensive. As a consequence, long-haul truck convoys are now quite large, often numbering several hundred vehicles.

The Soviets pay particular attention to the composition of what they call "movement support detachments" -sappers, Highway Troops, Highway Commandant's Service elements and other components who collectively conduct route reconnaissance, remove mines and obstacles, construct route bypasses and repair small sections of road to allow passage of the convoys. These forces are often the first to encounter enemy attacks and in addition suffer many casualties from mines. Soviet combat engineers, a major component of movement support detachments, are among the most highly decorated troops in Afghanistan.

There is now a substantial body of Soviet literature dealing with the mine problem in Afghanistan. Forces who regularly use the roads now receive instruction in detecting and neutralizing mines, though the skillful *Mujahedeen* use of these weapons requires the heavy employment of highly trained Soviet sappers. Armed and armored mine-rolling vehicles are widely used.

Because of the difficulty in detecting some types of mines and the infeasibility of using special mine rolling vehicles in every area and situation, Soviet sappers with hand-held mine detectors,

mine probes and sniffer dogs are an integral part of movement support detachments. Consequently, Soviet columns often have been observed moving at the speed of a mine-sniffing dog, increasing convoy vulnerability to ambush and extending resupply time.

Convoy escort forces under an escort group commander conform to the area of operation and the size of the convoy. Motorized rifle, tank, airborne, air assault and special operations forces have been used in this role. Typically, combat elements deploy near the head of columns, interspersed with-in it or alongside, and at the trail, where in at least some cases the strongest forces are located along with the technical support echelon.

Upon attack, escort forces deploy to engage the attackers, shielding the trucks with armored vehicles. The first goal is to move the convoy through the ambush and out of range of fire. The technical support elements at the end of the column either tow damaged vehicles to safety, repair those with slight damage under fire or push them aside and abandon them.

In one incident, a column on the way to Qonduz came under continuing *Mujahedeen* attack. An officer of the column's technical trail, mounted in an armored personnel carrier, was given ten minutes by his superior to repair a damaged truck towing a field kitchen. Failing this, the equipment items were to be left behind. Under the cover of fire provided by an escorting BMP armored personnel carrier, which itself suffered track damage during the engagement, the truck's brake hose was repaired, the BMP's track jury-rigged for operation and the three vehicles moved to safety.

Upon coming under attack, ground reaction forces respond to radio or other signals, as do designated helicopter or fixed-wing aviation fire support assets, in accord with preestablished communication procedures. In addition, transport troops themselves now perform major convoy defense roles. As one Soviet article on Afghanistan instructed, "An ambush, a burst of gunfire, an attack can await you beyond every hairpin bend . . . . Your only companion on the road, your friend and protector-a submachine gun-must be just as reliable as your truck's engine."

Soviet military training literature emphasizes that motor transport personnel must be able to fire automatic weapons from their cabs while on the move and at short stops. They also must be trained to fire RPGs (rocket propelled grenade launchers) as well as truck-mounted antiaircraft weapons.

Indeed, one of the most effective convoy defense means has become the gun truck, consisting of a ZU-23 twin-barreled 23-mm antiaircraft weapon mounted on the bed of a KamAZ or other truck model. Combining a high rate of fire, cannon rounds that are very effective against ground targets and elevation capabilities well-suited to firing at targets on commanding heights, the ZU-23 is highly regarded by the Soviets. One Soviet account, which also pointed to the vulnerability of gun crews, described the weapon's employment this way:

> A truck convoy commanded by Senior Lieutenant S. Nezhdanov came under surprise *dushman* [enemy] attack near the Salang Pass at 1950 on 24 March, 1985. It was fired upon from several directions by large-caliber machine guns using incendiary rounds. As a consequence, several trucks carrying fuel were set

> on fire. The gang's attack was repulsed by fire from antiaircraft guns assigned to protect the convoy. Particular bravery and heroism were displayed by the antiaircraft gun crew commanded by Private N. Levchuk. The crew was the first to open returning fire. Despite the raging flames and the accurate fire by the bandits, the antiaircraft gunners destroyed several gun emplacements with their well-aimed volleys. Private Levchak died heroically in the unequal battle.

Motor transport troops are frequently featured in the pages of Red Star and other Soviet military publications as the recipients of awards for bravery in combat. The extent to which these and other "rear service" personnel engage in direct combat actions, the performance of these troops and units, and the way in which skillful diversionary activity can influence the effectiveness of logistic support have had a profound effect on Soviet military planners and theorists charged with drawing and applying lessons learned from Afghanistan.

While the Afghanistan conflict has yet to reveal all of its lessons and asymmetries between Afghanistan and other theaters are clear, there have been some developments in Soviet approaches to sustainability that suggest Moscow's experience there is resulting in changes that extend beyond Afghan borders. There are, in addition, some implications that are worth consideration by U.S. planners as well. Unquestionably, those Soviet forces associated with the movement and supply of troops and materiel in Afghanistan have benefited from the hard lessons learned or relearned during eight years of conflict. These benefits have been both individual for those conscript, reserve and long-term service personnel involved and institutional for units and arms of service.

Nevertheless, despite clear improvements in basic skills and the dedicated application of sizable, often elite Soviet forces to LOC security tasks, Soviet and Afghan convoys and the logistic infrastructure overall continue to be successfully attacked. As a direct consequence, there has been a demonstrable increase in the attention given to rear area security training for logistic units of all types and particularly materiel support units. It is, as Soviet sources stress, no longer adequate for rear service units to perform their technical missions-they must also understand tactics and be able to fight.

Soviet concerns in this regard have been given new emphasis by the perceived resurgence of U.S. special operations forces and their potential threat to Soviet rear areas, as well as that posed by regular airborne and airmobile forces. This threat is believed to be particularly acute for Soviet logistic units operating in isolation from main forces-for example, forward detachments, operational maneuver groups and landed airborne units.

The result of this heightened Soviet concern with LOC protection will likely be far better armed and combat-trained rear service units and a dedicated rear security force structure that exceeds that planned for in pre-Afghanistan days.

The effective mine warfare and obstacle emplacing techniques employed by the *Mujahedeen* have had negative consequences for Soviet transportation and resupply far out of proportion to the resources used. While the *Mujahedeen* are skillful, innovative and brave, the mines they plant are laid manually on roads patrolled, swept and cleared by a military establishment that prides

itself on its engineers. Obstacles, similarly, are based on rock slides, fires or other means available to lightly equipped guerrilla forces.

Nevertheless, the Soviet allocation of movement support resources to convoys in Afghanistan-sapper, Highway Troop and Highway Commandant Service units-is extraordinary. It is likely that Soviet planners have revised their views on the optimum ratio of movement support to combat forces strength for the theaters opposite NATO.

Artillery fire bases covering critical sectors are part of Soviet highway defenses, such as this one about ten kilometers from Kabul on the Jalalabad road, occupied by two batteries of old M-30 122-mm howitzers.

Given U.S./NATO remote mine-laying capabilities, precision guided munitions, the potential damage to LOCs by other aviation, missile and artillery strike systems, and Soviet concerns about enemy diversionary activity, the perceived combat engineer and road support requirement for tactical and operational rear services may have increased substantially.

The heavy employment of helicopters to move troops and supplies, a feature of Soviet operations from the beginning of the invasion, remains key to the whole supply and medical evacuation system. They are used routinely for the resupply of remote garrisons and engaged or besieged units. Their importance has, in fact, increased as Soviet counterinsurgency efforts in Afghanistan have become more active.

The rapid delivery of supplies or evacuation of casualties in remote areas is in many cases only feasible by helicopter. As the Soviets have discovered, the farther removed from the fixed LOC security system, the more untenable road travel becomes.

This practical experience, together with the results of exercises, may have had two results. On the one hand, limited evidence suggests that Soviet rear service planners are more pessimistic about the possibility of maintaining even tenuous ground links for the supply of operational maneuver groups (OMGs), a prospect they appeared to be investigating (along with other

approaches) in the early 1980s. In this regard, a June 1987 Polish article dealing with the support of operational maneuver groups suggested that land links would not exist for tasks like evacuating casualties, Thus, it was pointed out, casualties may have to be carried along with the OMG or in extreme cases left behind "under the care of medical personnel."

On the other hand, successful, sustained helicopter support efforts in Afghanistan and increasingly effective helicopters like the Mi-26 Halo appear to have heightened Soviet/Warsaw Pact confidence in the potential of resupplying deep operations forces by air for longer periods of time.

Soviet military authors have positive things to say about the employment of what they have termed a helicopter "air bridge" to sustain forces behind enemy lines, with Polish military writings often more explicitly reflecting this same views of aviation's potential to support deep operations forces.

It seems likely that numerous and frequently relocated materiel support airfields will be a prominent feature of logistic support provided to large combined arms forces operating in enemy rear areas. Soviet/Warsaw Pact expectations about the scale and duration of this support are certainly being shaped by their Afghan experience.

Finally, the performance of the Soviet logistic system in Afghanistan raises questions about just how well Soviet and other Warsaw Pact reservists, hundreds of thousands of whom would comprise the bulk of a fully mobilized theater logistic system, could execute a theater rear service plan in all its complexity. This kind of question usually has been integral to any serious assessment of Warsaw Pact capabilities. The uneven performance of the Soviet conscript/ reservist-based rear service system in dealing with logistic requirements of far less scale in Afghanistan and the initial and continuing consequences of this performance further highlight an area of military capabilities that needs the closest attention from Western planners.

The Soviet experience in Afghanistan, while clearly instructional for Soviet military planners, may in addition suggest U.S./NATO approaches and priorities for countering a Pact theater strategic offensive that focuses on the early and continuing interdiction of the Soviet movement support system in all its dimensions.

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